



AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

# 4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: T- 4358

### TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2017-08-17-02 Date: 19-08-17  
Customer : Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.  
Address : T.Dasarahalli Sub Division, BBMP, Bangalore.  
Project Name : Improvements to roads and drains Nisarga School back side Sampangi Ramaiah layout at Bagalgunte ward No.14  
Agency : Technical Manager(West), KRIDL, Project Implementation unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010  
Customer's Reference : BBMP/EE/DD/WO/029/2017-18  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 17-08-17  
Sample ID No : 2017-08-17-02/01  
Sample Type : Birla Super 53grade  
Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,  
IS 4031 (Part 1,2 3,4,5, 6,11):1988  
IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4  
IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5  
IS 4031 Part 3, Determination of Soundness, Clause 5, Clause 6  
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5  
IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5  
IS 4031 Part 11, DETERMINATION OF DENSITY , Clause 6  
Date of test : 18-08-17

| Sl.No. | Physical properties                                           | Results     | Requirement as per IS 12269: 2013 |
|--------|---------------------------------------------------------------|-------------|-----------------------------------|
| 1      | Fineness by dry sieving (%)                                   | 2.14        | —                                 |
| 2      | Fineness by Air permeability method (m <sup>2</sup> /kg, Min) | 281.5       | 225m <sup>2</sup> /kg, Min        |
| 3      | Density (gm/cc)                                               | 3.19        | —                                 |
| 4      | Standard Consistency (%)                                      | 28.5%       | Not specified                     |
| 5      | Initial Setting time                                          | 195 minutes | Not less than 30 minutes          |
| 6      | Final Setting time                                            | 265 minutes | Not more than 600 minutes         |
| 7      | Soundness (Le Chatelier's Method)                             | 1.5mm       | Not more than 10 mm               |

**Note:**

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

Any correction in the report will make this report invalid

This report without prior written approval should not be reproduced or published in full or part.

Samples will be disposed after 30 days from the date of issue of test certificate

*[Handwritten signature]*

ಕಾರ್ಯದ ನಿರ್ವಹಣಾ ಅಧಿಕಾರಿ  
ಟಿ.ದಾಸರಾಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ  
ಬಾಗಲಗುಂಟೆ, ಬೆಂಗಳೂರು  
ದಿನಾಂಕ: 18/08/2017



FOR CIVIL Pro.

*[Handwritten signature]*

R KARTHIK RECHAN

Authorized Signatory

Quality Manager

Page 1/1

\*\*\*\*End of Report\*\*\*\*

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL |  
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005  
# 4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: T- 4358

### TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2017-08-17-02 Date: 15-09-17  
Customer : Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.  
Address : T.Dasarahalli Sub Division, BBMP, Bangalore.  
Project Name : Improvements to roads and drains Nisarga School back side Sampangi Ramaiah layout at Bagalgunte ward No.14  
Agency : Technical Manager(West), KRIDL, Project Implementation unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010  
Customer's Reference : BBMP/EE/DD/VO/029/2017-18  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 17-08-17  
Sample ID No : 2017-08-17-02/01  
Sample Type : Birla Super 53grade  
Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,  
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5  
IS 4031 Part 6, Determination of Compressive Strength, Clause 6  
Date of test : 18-08-17

| Compressive Strength |                     |                       |                                    |
|----------------------|---------------------|-----------------------|------------------------------------|
| Sl.No.               | Physical properties | Results               | Requirement as per IS 12269: 2013  |
| 1                    | 3 Days              | 29.5N/mm <sup>2</sup> | Not less than 27 N/mm <sup>2</sup> |
| 2                    | 7 Days              | 39.5N/mm <sup>2</sup> | Not less than 37 N/mm <sup>2</sup> |
| 3                    | 28 Days             | 55.5N/mm <sup>2</sup> | Not less than 53 N/mm <sup>2</sup> |

**Note:**

The results pertain to the samples received and tested.  
All information furnished by Customer/Representative  
Any correction in the report will make this report invalid  
This report without prior written approval should not be reproduced or published in full or part.  
Samples will be disposed after 30 days from the date of issue of test certificate

*[Signature]*

ಕಾರ್ಯದರ್ಶಿ ಕಾರ್ಯಾಲಯ ಅಧಿಕಾರಿ  
ಟಿ.ದಾಸರಾಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ  
ಮಾಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು  
ಬೆಂಗಳೂರು



FOR CIVIL Pro.

*[Signature]*  
R KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

Page 1/1  
\*\*\*\*End of Report\*\*\*\*

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL |  
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005

# 4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: T- 4358

### TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2017-08-17-02 Date: 20-08-17

Customer : Assistant Executive Engineer, T.Dasarahalli Sub Division, BBMP, Bangalore.

Address : T.Dasarahalli Sub Division, BBMP, Bangalore.

Project Name : Improvements to roads and drains Nisarga School back side Sampangi Ramaiah layout at Bagalgunte ward No.14

Agency : Technical Manager(West), KRIDL, Project Implementation unit, No.280, 59th Cross, 17th 'C' Main Road, 3rd 'Y' Block, Rajajinagar, Bangalore-560 010

Customer's Reference : BBMP/EE/DD/WO/029/2017-18

Source of Sample : Sample supplied by Agency

Sample condition : Satisfactory

Date of Receipt : 17-08-17

Sample ID No : 2017-08-17-02/02(a)

Sample Type : 40mm down size coarse aggregate

Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates )  
IS: 2386 :1963(Part - 1,3,4) RA2011  
IS 2386 Part 1: Particle Size and Shape  
IS 2386 Part 3: Specific gravity, Density, Voids, Water Absorption  
IS 2386 Part 4: Mechanical Properties

Date of test : 17-08-17

### SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : 15000 grams

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|------------|-----------|------------------------|-----------------------------------|------------------------------|-----------|-----------------------------|
| 1          | 80 mm     | 0                      | 0                                 | 0.0                          | 100       | 100                         |
| 2          | 40 mm     | 414                    | 414                               | 2.8                          | 97.2      | 90-100                      |
| 3          | 20 mm     | 5154                   | 5568                              | 37.1                         | 62.9      | 30-70                       |
| 4          | 10 mm     | 7188                   | 12756                             | 85.0                         | 15.0      | 10-35                       |
| 5          | 4.75 mm   | 1998                   | 14754                             | 98.4                         | 1.6       | 0-5                         |
| 6          | Pan       | 246                    | 15000                             | 100.0                        | 0         | ---                         |

Page 1/2

*Signature*



*Signature*

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL  
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |